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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,311	06/19/2001	Steven B. Adler	AUS920010589US1	6894

46033 7590 02/10/2005

IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT
11400 BURNET ROAD
AUSTIN, TX 78758

EXAMINER

HO, THOMAS M

ART UNIT PAPER NUMBER

2134

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,311

Applicant(s)

ADLER ET AL.

Examiner

Thomas M Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/19/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-17 are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Applicant appears to be claiming a method for handling information. Specifically, applicant's invention deals in particular with the field of object oriented **design**. It is well understood to those of ordinary skill in the computer science arts, that programming data structures are intangible, though programmed structures may be implemented on a medium to produce a tangible result because the computer executes a computer program as a set of instructions.

The basic data structure embodying the vast majority of object oriented languages is the class, which is a data structure that contains it's own functions, it's own data attributes, variables, permissions, and other complicated aspects. With the rise in complexity of programs in large scale structures and businesses, there have been "patterns" developed to organize these classes to produce a program.

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However, it is the Examiner's position that these patterns, associations, representations, and provisions merely manipulate abstract ideas.

For Example, in the actions described by claim 1, only the manipulations of data and abstract ideas has occurred.

Claim 1:

A method for handling personally identifiable information, said method comprising:

- Providing in a computer a first set of object classes
- Representing active entities in an information-handling process, wherein a limited number of privacy-related actions represent operations performed on data
- Providing in said computer a second set of object classes representing data and rules in said information-handling process, wherein at least one object class has said rules associated with said data;
- Handling transactions involving said personally identifiable information, using said computer and said object classes.

No elements or aspects of tangibility are present. Applicant merely discloses that objects are "provided" and transactions "handled".

MPEP 2106 Section IV(b)(1) discloses:

If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. Thus,

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a process consisting solely of mathematical operations, i.e., converting one set of numbers into another set of numbers, does not manipulate appropriate subject matter and thus cannot constitute a statutory process

In practical terms, claims define nonstatutory processes if they:

- consist solely of mathematical operations without some claimed practical application (i.e., executing a "mathematical algorithm"); or*
- simply manipulate abstract ideas, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759), without some claimed practical application.*

Furthermore, the claimed invention fails to produce any tangible result. Information is merely "handled". MPEP 2106 states *"The claimed invention as a whole must produce a "useful, concrete, and tangible" result to have a practical application.*

For both the reasons of manipulating only abstract ideas, and the lack the tangible results of the invention, the claims are rejected under 35 USC § 101.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-10, 12-13, 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin.

In reference to claim 1:

(Martin, "Principles of Object Oriented Analysis and Design") discloses a method for handling personally identifiable information, said method comprising:

- Providing in a computer a first set of object classes, where object classes are classes that are later to be instantiated into objects. (pages 23-24, "What is a Class?")
- Representing active entities in an information-handling process, wherein a limited number of privacy-related actions represent operations performed on data, where the active entities are the objects themselves, and the privacy related actions-representing operations performed on data are the operations used to read and manipulate data of the object. (page 19, "operations")
- Providing in said computer a second set of object classes representing data and rules in said information-handling process, wherein at least one object class has said rules associated with said data, where objects are capable of representing data and rules in their interrelationships with other objects. (page 144, "Object Structure Analysis/ Object Behavior Analysis")
- Handling transactions involving said personally identifiable information, using said computer and said object classes, where transactions are performed in the interactions of the objects between one another. (page 146-147, Diagrams).

In reference to claim 2:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 1, wherein said object classes include one or more object classes representing parties, selected from the group consisting of

- A data user object class, where the student is the data user object class. (Page 158)
- A data subject object class, where the subject object class is the class. (page 158)
- A guardian object class, where the guardian object class is a stock withdrawal subsystem. (page 194)
- A privacy authority object class, where the privacy authority class is a server class. (page 192)

In reference to claim 4:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method for improving the handling of personally identifiable information, said method comprising:

- Performing an initial assessment of an information handling process, where the initial assessment is the analysis of the system to be modeled in an Object oriented process. (pages 59-60, "Models of Reality")
- Constructing a model of said information handling process, based on said initial assessment, where the model of said information handling process is performed once an analysis has been made. (pages 59-60, "Models of Reality")

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- Providing output, based on said gathering and constructing, that identifies at least one way in which said personally identifiable information could be better handled, where a particular technique in the refinement of the object model is the practice of using CRC cards to gain a better understanding about how to handle the model at hand. (Pages 187-190, "Responsibility driven design")
- Wherein said constructing includes:
- Representing entities, data, and rules in said information handling process by using a limited number of object classes, where objects represent entities, where the data are attributes of objects, and where rules are functions that typify the interaction between objects. (page 156, "models and diagrams") & (page 140, center diagram, 146-147, Diagrams) & (page 166)
- Representing operations performed on data by using a limited number of privacy-related actions, where the active entities are the objects themselves, and the privacy related actions-representing operations performed on data are the operations used to read and manipulate data of the object. (page 19, "operations")
- Representing transactions by using said limited number of object classes and said limited number of privacy-related actions, where the transactions are interactions between the modeled objects, (Page 118, "Events triggers and Operations") and the request for data is a privacy related action. (page 19, "operations")

In reference to claim 5:

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(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim wherein said providing output further comprises identifying at least one way in which said information-handling process could be improved, where a particular technique in the refinement of the object model is the practice of using CRC cards to gain a better understanding about how to handle the model at hand. (Pages 187-190, "Responsibility driven design")

In reference to claim 6:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 4, wherein said providing output further comprises identifying at least one way to improve compliance with a law or contract, where the CRC method is a technique for better identifying responsibilities of the objects (page 188, "responsibilities and collaborators"), and it is known in the art that groups responsibilities are contracts. (page 191, "contracts")

Claims 7, 9 are rejected for the same reasons as claim 5.

In reference to claim 8:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 4, further comprising designing a modification to said information-handling process, based on said constructing and providing, where modifications are constantly being designed in the creation of the object oriented model of the system from the

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creation of the model, to the creation of its design, to the generation of the code. (page 60)

Claim 10, 13, 16 are rejected for the same reasons as claim 2.

Claims 12, 15 are rejected for the same reasons as claim 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 11, 14, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin.

In reference to claim 3:

(Martin, "Principles of Object Oriented Analysis and Design") discloses the method of claim 1, wherein said object class, having said rules associated with said data. (page 144, "Object Structure Analysis/ Object Behavior Analysis")

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(Martin, "Principles of Object Oriented Analysis and Design") fails to explicitly disclose representing the rules as a filled paper form, including both collected data and rules regarding said collected data.

(Martin, "Principles of Object Oriented Analysis and Design") does however disclose that rules may be written in the English Language. (page 133-134, "Rules Expressed in English"). Martin discloses more rules on pages (138-139, Box 10.1 & 10.2)

The Examiner takes official notice that representing the rules as a filled paper form, including both collected data and rules regarding said collected data was well known in the art at the time of invention.

It would have been obvious to one of ordinary skill in the art at the time of invention to collect rules as a filled paper form.

Claims 11, 14, 17 are rejected for the same reasons as claim 3.

Conclusion

8. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (571)272-3838.

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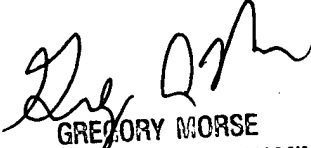
The Examiner may also be reached through email through Thomas.Ho6@uspto.gov

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist	Telephone: 571-272-2100	Fax: 703-872-9306
Customer Service Representative	Telephone: 571-272-2100	Fax: 703-872-9306

TMH

January 27th, 2005


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100